

## REMARKS

The Applicant would like to thank the Examiner for the courteous Office Action.

Claims 1-10, 12-25, and 27-44 are present in the application. Claims 1-44 have been rejected. Claims 16 and 31 have been amended herein; no new matter has been added. Claims 11 and 26 have been cancelled as redundant given the amendments to claims 16 and 31.

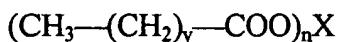
### Third Request to Correct Filing Receipt

Applicants have made two previous requests to correct the filing receipt for this application. One of the priority documents was inadvertently identified by the Applicant as "60/447,148" when in fact it should have read 60/477,148. A copy of the previous Resubmission with Preliminary Amendment is enclosed. This Resubmission was mailed to the Patent and Trademark Office on 5 October 2004. The Applicants earnestly solicit the help of the Examiner in resolving this issue by helping to generate a correct filing receipt. The Applicants regret any confusion that this inadvertent error may have caused.

### 35 U.S.C. §103 Rejection

The Examiner has rejected claims 1-44 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Pat. No. 6,248,699 to Subramanian, et al. for reasons of obviousness.

The Examiner finds that Subramanian, et al. discloses improved hydrocarbon *gels* useful in oil field applications including slurry pipeline transport. Subramanian, et al. is further seen to disclose a *gelled* hydrocarbon fluid useful as a fracturing fluid in subterranean formations comprising at least one *gelling agent* which is a salt of a carboxylic acid having about 6 to about 30 carbon atoms. Subramanian, et al. is additionally noted to teach that the *gelling agents* may be prepared by heating the carboxylic acid with a multivalent metal compound. Preferably a ratio of about two or three carboxylic acid equivalents to one metal is formed as represented by the formula:



wherein *y* is 6 to 28, *n* is 2 or 3 and *X* is a multivalent metal such as aluminum. The Examiner finds that Subramanian, et al. also teaches that the *gelling agents* may be

added directly to hydrocarbon liquids or to a mixture of hydrocarbon liquids. Suitable hydrocarbon liquids used in the fracturing process of the prior art include diesel fuel, crude oil, Fracsolve® fracturing liquid, toluene, xylene, hexane, or other hydrocarbon solvents. Subramanian, et al. is further seen to teach that the *gelling agents* may be added to the hydrocarbon liquids in amounts of less than about 20%, preferably less than about 10% and most preferably less than about 5% by weight of the mixture. See column 5, lines 20-28. The examiner is of the position that Subramanian, et al. meets the limitations of the drag reducing composition of the claims which include an aluminum monocarboxylate or aluminum dicarboxylate, in combination with a hydrocarbon solvent. The examiner is also of the position that method of claims 1, 14, 15 and 16 which comprise the step of adding to the hydrocarbon fluid an aluminum (di)carboxylate is clearly taught by the prior art. It has been held that a recitation of the intended use such as “reducing drag of a fluid” carries no weight in the claims since the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art; and that if the prior art structure is capable of performing the intended use, then it meets the claims. (Emphasis added.)

The Applicants respectfully traverse.

To support an obviousness rejection, the Examiner has the initial burden of establishing a *prima facie* case of obviousness of the pending claims over the cited prior art, *In re Oeticker*, 977 F.2d 1443, 1445; 24 U.S.P.Q.2d 1443 (Fed. Cir. 1992). Applicants respectfully submit that the Examiner has not established such a *prima facie* case of obviousness herein for the claims as amended herein.

The Examiner’s attention is respectfully directed to the amendments to independent claims 16 and 31 herein where the language “where the bulk fluid viscosity of the fluid is not increased by the aluminum carboxylate” has been included at the end of each claim. Support for this language is found at the end of claims 1, 14, 15, 17, 29, and 30 as originally filed and elsewhere, and thus the inclusion of this language in these two independent claims does not constitute an improper insertion of new matter. All claims now either explicitly or by dependency contain this recitation.

As the Examiner notes, the Subramanian, et al. reference teaches metal salts of carboxylic acids as *gelling agents*. As noted in column 1, lines 37-43 therein:

Fracturing fluids may be *thickened or gelled* through the use of various chemical agents which act to *increase viscosity* or induce the gel formation. It is in fact widely accepted that the *viscosity of liquid hydrocarbon fracturing fluids can be increased* by a variety of *thickening agents* including fatty esters, orthophosphate esters, and aluminum complexed fatty acids. (Emphasis added.)

Applicants respectfully submit that the method of the claimed invention *does* in fact result in a structural difference over the Subramanian, et al. reference. The claimed invention herein requires that the bulk fluid viscosity of the fluid (previous defined in each respective claim) is *not* increased by the aluminum carboxylate. This is in contrast to the Subramanian, et al. requirement that the bulk viscosity of the fluid is increased or, in other words, the fluid is gelled. The fluids and methods of the Applicants and of Subramanian, et al. are fundamentally structurally and physically different because in Applicants' fluids and methods the bulk viscosity of the fluid is *not* increased, whereas in Subramanian, et al.'s fluids and methods the bulk viscosity of the fluid *is* increased.

Applicants further respectfully submit that there is no teaching, hint or suggestion in Subramanian, et al. that Applicants' aluminum carboxylates both reduce the drag of the fluid and do not increase the bulk viscosity thereof, as recited in the claims. Applicants additionally respectfully submit that there is no teaching in Subramanian, et al. about how its teachings may be modified to accomplish the structures or methods of the claimed invention. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266; 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). Subramanian, et al. contains no such teaching of desirability of making the modification to result in Applicants' invention or even what the modification should be.

The Examiner did not explicitly address claims 32-44 which relate to aluminum dicarboxylate dispersion compositions. However, Applicants respectfully submit that Subramanian, et al. does not disclose, teach, suggest, or hint about the existence of these

aluminum dicarboxylate dispersion compositions, and thus such compositions are not obvious from Subramanian, et al.

Because a *prima facie* case of obviousness has not been established against the claims, as amended herein, Applicants respectfully submit that the instant rejection should be withdrawn. Reconsideration is respectfully requested.

It is respectfully submitted that the amendments and arguments presented above overcome the rejection and place the claims and application in condition for allowance. Reconsideration and allowance of the claims are respectfully requested. The Examiner is respectfully reminded of her continuing duty to indicate allowable subject matter. The Examiner is also invited to call the Applicant' attorney at the number below for any reason, especially any reason that may help advance the prosecution.

Respectfully submitted,  
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